

WE CLAIM:

1. A computer-readable medium encoded with a computer-readable first data structure, comprising:
 - a definition data field defining the data structure as a first namespace, the first data field including a common name portion associated with the first namespace and a unique identifier portion associated with the first namespace, the common name portion being operative to identify the first namespace in a human-readable manner, the unique identifier portion being capable of distinguishing the first namespace from other namespaces.
2. The computer-readable medium of claim 1, wherein the definition data field for the first namespace further comprises an element indicating that the first namespace may be changed.
3. The computer-readable medium of claim 1, further comprising a computer-readable second data structure, comprising:
 - a second definition data field defining the second data structure as a second namespace; and
 - an import data field including a local name declaration identifying the first data structure for import into the second data structure, the import data field identifying the first data structure by the common name portion and the unique identifier portion.
4. The computer-readable medium of claim 3, wherein the second namespace further comprises an export data field including an atomic name by which at least a portion of the second namespace is published for use by other computer-executable components.
5. The computer-readable medium of claim 3, wherein the import data field further comprises a local name declaration that assigns a local name to the first namespace within the scope of the second namespace.

6. The computer-readable medium of claim 5, wherein a declaration made in the first namespace is accessible in the scope of the second namespace by reference to the local name assigned to the first namespace.

7. The computer-readable medium of claim 6, wherein a conflict between the common name portion associated with the first namespace and a declaration made in the second namespace is resolved with reference to the unique identifier portion

8. A computer-readable medium having computer-executable components, comprising:

a first namespace having a common name and a unique identifier, the first namespace including a plurality of declarations; and

a second namespace having an import declaration that causes the first namespace to be included within the scope of the second namespace, the import declaration defining a local name that identifies the first namespace by the common name and the unique identifier such that a declaration within the plurality of declarations in the first namespace is accessible in the scope of the second namespace by reference to the local name for the first namespace.

9. The computer-readable medium of claim 8, wherein the second namespace further comprises an export declaration that makes at least a portion of the first namespace available outside the second namespace in association with a second common name.

10. The computer-readable medium of claim 8, further comprising a third namespace importing the second namespace and assigning to the second namespace a second local name such that the declaration within the plurality of declarations within the first namespace is accessible in the scope of the third namespace by reference to the second local name for the second namespace.

11. The computer-readable medium of claim 10, wherein the third namespace forms a namespace hierarchy having the first namespace as a root and the second and third namespaces as importers.

12. The computer-readable medium of claim 11, wherein the first namespace incorporates a legacy namespace and makes available any declarations within the legacy namespace as elements of the first namespace.

13. A computer system that uses namespaces, comprising:
a first namespace having a common name and a unique identifier, the first namespace including a plurality of declarations; and
a second namespace having an import declaration that causes the first namespace to be included within the scope of the second namespace, the import declaration defining a local name that identifies the first namespace by the common name and the unique identifier such that a declaration within the plurality of declarations in the first namespace is accessible in the scope of the second namespace by reference to the local name for the first namespace.

14. The computer system of claim 13, wherein the second namespace further comprises an export declaration that makes at least a portion of the first namespace available outside the second namespace in association with a second common name.

15. The computer system of claim 13, further comprising a third namespace importing the second namespace and assigning to the second namespace a second local name such that the declaration within the plurality of declarations within the first namespace is accessible in the scope of the third namespace by reference to the second local name for the second namespace.

16. The computer system of claim 15, wherein the third namespace forms a namespace hierarchy having the first namespace as a root and the second and third namespaces as leaves.

17. The computer system of claim 16, wherein the first namespace incorporates a legacy namespace and makes available any declarations within the legacy namespace as elements of the first namespace.

18. A computer-implemented method for creating a namespace, comprising:
declaring a first namespace with a unique namespace identifier, the first namespace including a common name and a plurality of declarations;
importing the first namespace into a second namespace using the unique namespace identifier and a local name;
accessing a declaration within the plurality of declarations in the first namespace within the scope of the second namespace by reference to the local name.

19. The computer-implemented method of claim 18, wherein the local name for the first namespace comprises the common name.

20. The computer-implemented method of claim 18, wherein the local name for the first namespace comprises an alias assigned to the first namespace.